the issue with State Governments and private sector parties. One of the possible locations under consideration is in near Nagpur, however the final decision with regard to setting up a SEZ would depend on various techno-economic conderations of investors.

Participation of private sector for production of renewable energy

†1018. SHRI DATTA MEGHE: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether Government has taken steps to promote participation of the private sector to encourage the production of renewable energy, as a source of alternative energy;

(b) if so, the details thereof;

(c) whether it is a fact that the renewable energy sector has the capactiy of generating more than 80 thousand MW power; and

(d) if so, the steps taken by Government to achieve this capacity?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI VILAS MUTTEMWAR): (a) and (b) Yes, Sir. The government has been encouraging private investment in renewable energy sector through a mix of fiscal and financial incentives that include capital/interest subsidy, accelerated depreciation, nil/concessional excise and customs duties. Further, benefit under Section 80- 1A of Income Tax Act, 1961 is available to undertakings setup for the generation or generation and distribution of Renewable power in India. This apart, preferential tariff for grid interactive renewable power is being given in most potential States.

(c) A potential of 84,776 MW has been estimated from renewable energy sources such as wind, biomass, solar and small, hydro in the country as per details given in the enclosed Statement. (*See* below)

(d) The grid-interacttive power installed capacity from the renewable sources like wind, biomass, solar and small hydro in the country at the end of the 10th Plan, *i.e.* upto 31.3.2007 was 10,250 MW which has reached 11,447 MW as on 31.01.08. A capacity addition of 14,000 MW is proposed during the 11th Plan. Most of this capacity is envisaged through private investment. Steps taken to encourage the same are explained in reply to parts (a) and (b) above.

Statement

Details of estimated potential of grid-interactive renewable energy sources

Sl. No.	Sources/Systems	Estimated Potential
	Grid-interactive renewable power	
1.	Bio Power (Agro residues & Plantations)	16,881[1]
2.	Wind Power	45,195[2]
3.	Small Hydro Power (up to 25 MW)	15,000[3]
4.	Cogeneration-bagasse	5,000[4]
5.	Waste to energy (Urban & Industrial)	2,700[5]
	TOTAL: (in MW)	84,776[6]

MW=Megawatt *Total target for 1 and 4 @Total target for 5 and 9

†Original notice of the question was received in Hindi.

NOTE:—

(1) Although the potential is based on surplus agro-residues, in practice there are several barriers in collection and transportation of such agro-residues to the generation site and biomass power generation units prefer to use fuel-wood for techno-economic reasons. A potential of 45,000 MW from around 20mha of wastelands assumed to be yielding 10MT/ha/anum of woody biomass having 4000 k-cal/kg with system efficiency of 30% and 75% PLF has not been taken into account. In order to realize this potential a major inter-Ministerial initiative involving, among other, Environment & Forests, Agriculture, Rural Development, and Panchayati Raj would be required. Further, a Biomass Atlas is under preparation which is expected to more accurately asess State-wise renewable energy potential from agro-residues.

(2) Potential based on areas having wind power density (wpd) greater than 200 W/m^2 assuming land availability in potential areas @ 1 per cent and requirement of wind farms @ 12 ha/MW, not all of which may be technically feasible for grid-interactive wind power. In line with international practice for setting up grid-interactive wind power systems on sites having wpd greater than 300 W/m^2, potential would be 5000 MW. Further, preliminary surveys do not at this juncture suggest a sizeable grid-interactive off-shore wind power potential.

(3) Technically feasible and economically viable potential is generally accepted at 40% of the total estimated potential. Accordingly, the technically feasible and economically viable small hydropower potential could be around 6000MW.

(4) With new sugar mills and modernization of existing ones, technically feasible potential is assessed at 5000 MWe, not all of which may be economically viable. furthermore, several sugar companies/cooperatives are unable to develop bankable projects on account of their financial and liquidity positions.

(5) With expansion of urban population post census 2001, current technically feasible municipal waste-to-energy potential is assessed at 1700 MWe, not all of which may be economically viable. However, subsidy disbursement under the municipal waste to energy programme had been kept in abeyance onthe orders of the Supreme Court in case of a PIL, in May 2005. This stay has now been vacated for setting up 5 pilot projects.

(6) Not all of this renewable energy potential may be suitable for grid-interactive power for technical and/or economic reasons. Further, estimate excludes potential for solar power which is dependent on future developments that might make solar technology cost-competitive for grid-interactive power generation applications.

Power generation by waste and wind

†1019. SHRI JAI PARKASH AGGARWAL: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to State:

(a) the number of power projects set up in different States as on date, with the Central Government assistance for power generation by way of making use of waste and wind;

(b) the quantum of power being generated in these power plants;

(c) the details of possibilities of power generation, by making use of waste and wind in the backward and rural areas that have been explored; and

(d) the amount of assistance provided by the Central Government to the States during the last two years for power generation by making use of waste and wind?

†Original notice of the question was received in Hindi.